

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 09286043
PUBLICATION DATE : 04-11-97

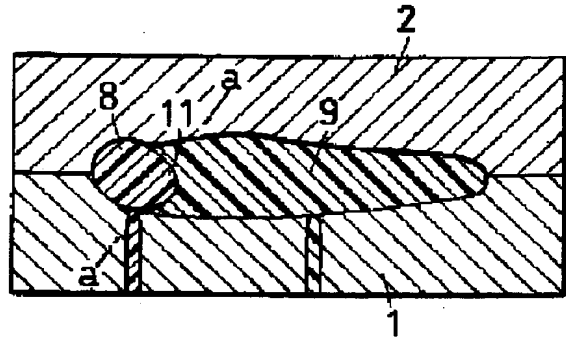
APPLICATION DATE : 23-04-96
APPLICATION NUMBER : 08126395

APPLICANT : MEIWA SANGYO KK;

INVENTOR : NARUTOMI MASANORI;

INT.CL. : B29C 45/16

TITLE : MONOLITHIC MOLDING OF HARD AND
SOFT DIFFERENT MATERIALS AND
MOLDED PRODUCT



ABSTRACT : PROBLEM TO BE SOLVED: To increase the bonding strength of boundary surfaces by injecting a hard resin material and a soft resin material same thereto in quality into the different parts of the same cavity of a mold in a liquid state and separating the hard and soft resin materials after curing from the boundary surface being curved surface thereof to monolithically mold them.

SOLUTION: A molten hard resin 8 is injected into a mold element 1, for example, from the gate on the side of the head part thereof and a molten soft resin 9 is injected into the mold element 1 from the gate on the side of the tail part thereof. The hard and soft resins 8, 9 are different in hardness but same in quality. The cooled and cured hard and soft resins 8, 9 are separated from the boundary surface 11 being curved surface of them and a part of the curved surface 11 separating the hard and soft resins 8, 9 is formed to the line closed on the cross section shown by an a-a line. That is, the projected surface formed, for example, in consideration of the vertical direction of a cavity of the hard resin 8 and the recessed surface of the soft resin 9 are bonded and the hard and soft resins 8, 9 same to each other or same in quality are integrally bonded in the vicinity of the boundary surface 11.

COPYRIGHT: (C) JPO

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-286043
 (43)Date of publication of application : 04.11.1997

(51)Int. Cl.

B29C 45/16

(21)Application number : 08-126395

(71)Applicant : TAISEI PLUS KK
MEIWA SANGYO KK

(22)Date of filing : 23.04.1996

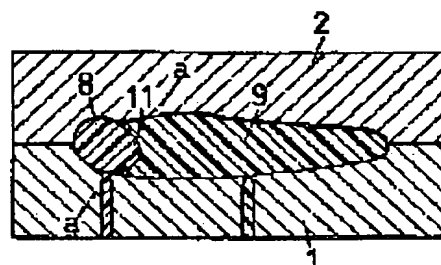
(72)Inventor : NARUTOMI MASANORI

(54) MONOLITHIC MOLDING OF HARD AND SOFT DIFFERENT MATERIALS AND MOLDED PRODUCT

(57)Abstract:

PROBLEM TO BE SOLVED: To increase the bonding strength of boundary surfaces by injecting a hard resin material and a soft resin material same thereto in quality into the different parts of the same cavity of a mold in a liquid state and separating the hard and soft resin materials after curing from the boundary surface being curved surface thereof to monolithically mold them.

SOLUTION: A molten hard resin 8 is injected into a mold element 1, for example, from the gate on the side of the head part thereof and a molten soft resin 9 is injected into the mold element 1 from the gate on the side of the tail part thereof. The hard and soft resins 8, 9 are different in hardness but same in quality. The cooled and cured hard and soft resins 8, 9 are separated from the boundary surface 11 being curved surface of them and a part of the curved surface 11 separating the hard and soft resins 8, 9 is formed to the line closed on the cross section shown by an a-a line. That is, the projected surface formed, for example, in consideration of the vertical direction of a cavity of the hard resin 8 and the recessed surface of the soft resin 9 are bonded and the hard and soft resins 8, 9 same to each other or same in quality are integrally bonded in the vicinity of the boundary surface 11.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998, 2000 Japanese Patent Office